

Citizen Science: Use in Science, Management and Policy

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I Want My Data Used

What are the potential “uses” of data?

- Use by other scientists
- Use in management
- Development of policy

Use by Scientists

- Analysis
- Publication – informal or peer-reviewed
- Credibility of data
 - Standardized, rigorous, verifiable
- Data in useable format
 - Online or transmitted electronically
 - Spreadsheet or database
- Funding-interest to pursue issue

Use in Management & Policy

- Management
 - Bearing on issue of interest –whose involved now?
 - Availability of data & analysis
 - Acceptance by management
- Policy
 - Agency regulations, management plans, WACs
 - RCWs – laws passed by legislature
 - Budget development

Citizen Science in Use

Past, Present & Future

- Christmas Bird Counts
- Hood Canal DO Program
- NW Straits
 - Marine Resource Committees in new counties
- *NatureMapping* and Pacific Education Institute

Start of *NatureMapping*

Began with GAP analysis

Involve portions of the public that otherwise are excluded from collection, analysis, and debate about biodiversity issues affecting their region and state through hands-on learning experiences

Nationwide *NatureMapping* Network

8 states and multiple agencies

NatureMapping - WA

“Tell us what you see and where you see it”

Workshops to train participants

10 *NatureMapping* centers and network of partners

Current WA modules on the web

Wildlife, Water Module (organisms and water quality sections),
Marine, Mollusks, Community Explorer

Data stored and available on the web

<http://depts.washington.edu/natmap/>

Pacific Education Institute

- Citizen Science as an educational opportunity
 - *NatureMapping* projects
- Defines three levels of science inquiry
 - Descriptive, comparative, correlative
 - First two levels recommended for schools
- Teacher training
 - Field Studies – science inquiry
- <http://www.pacificeducationinstitute.org/>

Projects



- **Oak Creek Habitat Assessment**
- **Adopt-a-farmer-short-horned lizard**
- **Pierce County Biodiversity Network**
 - Lower White River & Gig Harbor bioblitzes
- **Warden School Project Burrow-ground squirrels**
- **Project CAT-mountain lion studies**
- **Mule Deer project**
- **Bainbridge Island *NatureMapping* by schools**
- **Oak Tree Park – Tacoma**
- **Sunnyside Ecosystem-swallows/wrens/nest boxes**
- **Battleground school stream surveys**

Projects in Development

Intertidal Guidelines

- o New *NatureMapping* module
- o Under development with PEI, *NatureMapping*, Seattle Aquarium and WDFW

WDFW amphibian protocols

- o Currently being piloted
- o Verification by experts



Future of Citizen Science

- Issues and opportunities
 - Burgeoning population in WA state
 - Schools seeking science training for students
- Linkages between scientists and citizens
 - Shrinking management budgets
- CS **absolutely vital** for large projects requiring large on-the-ground data collection

“It is, by common consent, a good thing for people to get back to nature.”

Aldo Leopold in *Conservation Esthetic*

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